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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/081,724

02/20/2002

Mark Thomas Lavelle

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11/01/2006

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EXAMINER

WARE, CICELY Q

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,724

Applicant(s)

LAVELLE ET AL.

Examiner

Cicely Ware

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25, 29, 31 and 33-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29, 31 and 33-35 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-25, 36 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 5/9/2006 have been fully considered but they are not persuasive.

a. On Pgs. 13-15 of applicant's REMARKS/ARGUMENTS applicant asserts that Riazi et al. does not disclose "sending a spread spectrum modulation pattern".

Examiner disagrees. Examiner asserts that Riazi et al. in fact discloses "a spread spectrum modulation pattern which is determined by said host transceiver unit after said host transceiver unit and said human interface device have acknowledged each other's presence". Examiner asserts that Riazi et al. uses spread spectrum modulation frequency hopping. Examiner asserts that a spread spectrum modulation pattern is a pilot code or pn sequence used in CDMA technology. Inherently pilot codes and/or pn sequences are used by the base station to distinguish between different mobile stations. Riazi et al. discloses wherein the base station does not transmit until after an acknowledge signal is sent from the handheld terminal, which is established after the handheld is turned on.

Examiner asserts that applicant does not claim "sending a pattern for future hopping" (pg. 14) nor wherein "the base station knows the pattern of frequency hopping in advance" (pg. 14). Nor does applicant claim a procedure for frequency hopping.

Therefore the original rejection stands.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-12, 14-19, 20, 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nahi et al. (US Patent 6,166,734) in view of Riaz et al. (US Patent 6,748,005)

(1) With regard to claim 1, Nahi et al. discloses in (Figs. 1, 2A-2C, 3) a system for wireless transfer of data, said system comprising: a host transceiver unit configured to be connected with a host via a bus (Fig. 3 (62)), and configured to wirelessly exchange data with a human interface device; a human interface device configured to wirelessly exchange data with a host transceiver; and computer readable media having instructions thereon, said instructions comprising routines for synchronizing said host transceiver unit and said human interface device for wirelessly exchanging data between said host transceiver and said human interface device at a spread spectrum modulation pattern (abstract, col. 1, lines 20-26, col. 2, lines 59-67-col. 3 lines 1-9, col. 4, lines 51-55, col. 7, lines 4-24, col. 9, lines 47-57, col. 12, lines 24-26).

However Nahi et al. does not disclose a spread spectrum modulation pattern which is determined by said host transceiver unit after said host transceiver unit and said human interface device have acknowledged each other's presence.

However Riazi et al. discloses a spread spectrum modulation pattern which is determined by said host transceiver unit after said host transceiver unit and said human interface device have acknowledged each other's presence (col. 2, lines 11-24, col. 10, lines 17-44).

Therefore it would have been obvious to one of ordinary skill in the art to modify Nahi et al. in view of Riazi et al. to incorporate a spread spectrum modulation pattern which is determined by said host transceiver unit after said host transceiver unit and said human interface device have acknowledged each other's presence in order to provide a portable unit for interfacing with a nearby personal computer, allowing low cost access to the Internet and other information services (Riazi et al., col. 1, lines 64-67).

(2) With regard to claim 2, claim 2 inherits all the limitations of claim 1. Riazi et al. further discloses wherein said spread spectrum modulation is a frequency hopping spread spectrum modulation (col. 2, lines 20-24).

(3) With regard to claim 4, claim 4 inherits all the limitations of claim 1. Riazi et al. further discloses wherein said routines for synchronizing said host transceiver unit and said human interface device comprise the broadcasting of a first signal at a first broadcasting pattern by one of said host transceiver and said human interface device in response to powering up one of said host transceiver unit and said human interface device respectively, wherein said first signal is intended to be received by one of said human interface device and said host transceiver unit (col. 10, lines 1-44).

(4) With regard to claim 5, claim 5 inherits all the limitations of claim 4. Riazi et al. further discloses wherein said first signal comprises a proposal ID signal (col. 10, lines 29-44).

(5) With regard to claim 6, claim 6 inherits all the limitations of claim 6. Riazi et al. further discloses wherein said routines for synchronizing said host transceiver unit and said human interface device comprise routines for causing said human interface device to switch to broadcasting at a broadcast pattern matching that of the host transceiver unit after a receipt of a signal transmitted by said host transceiver unit, thus synchronizing said host transceiver unit and said human interface device (col. 9, lines 26-54).

(6) With regard to claim 7, claim 7 inherits all the limitations of claim 6. Riazi et al. further discloses wherein said human interface device transmits an acknowledgment signal to said host transceiver unit after having switched to broadcasting at a pattern matching that of the host transceiver unit (col. 10, lines 1-44).

(7) With regard to claim 8, claim 8 inherits all the limitations of claim 7. Riazi et al. further discloses wherein said acknowledgment signal includes a signal originally sent by said host transceiver unit (col. 10, lines 17-44).

(8) With regard to claim 9, claim 9 inherits all the limitations of claim 6. Riazi et al. further discloses wherein said system is configured to transfer data between said host transceiver and said human interface device at a second broadcast pattern after said human interface device has synchronized with the host transceiver unit (col. 10, lines 29-67 – col. 11, lines 1-2)

(9) With regard to claim 10, claim 10 inherits all the limitations of claim 9. Riazi et al. further discloses wherein said second broadcast frequency pattern is established by said host transceiver unit (col. 10, lines 45-47).

(10) With regard to claim 11, claim 11 inherits all the limitations of claim 1. Riazi et al. further discloses wherein said routines for synchronizing said host transceiver unit and said human interface device comprise routines for causing said host transceiver device to switch to broadcasting at a broadcast pattern matching that of the human interface device after a receipt of a signal transmitted by said human interface device, thus synchronizing said host transceiver unit and said human interface device (col. 10, lines 45-61).

(11) With regard to claim 14, claim 14 inherits all the limitations of claim 1. Nahi et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 2.4 GHz wireless connection (col. 6, lines 52-63, col. 7, lines 4-14).

(12) With regard to claim 15, claim 15 inherits all the limitations of claim 1. Nahi et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 900 MHz wireless connection (col. 6, lines 52-63, col. 7, lines 4-14).

(13) With regard to claim 16, claim 16, inherits all the limitations of claim 1. Nahi et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 2.4 GHz spread spectrum wireless connection (col. 6, lines 52-63, col. 7, lines 4-14).

(14) With regard to claim 17, claim 17 inherits all the limitations of claim 1. Nahi et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 900 MHz spread spectrum wireless connection (col. 6, lines 52-63, col. 7, lines 4-14).

(15) With regard to claim 18, claim 18 inherits all the limitations of claim 1. Nahi et al. further discloses wherein said host is selected from the group consisting of a personal computer, a handheld computer, an interactive set-top-box, an interactive game console and combinations thereof (col. 1, lines 28-49, col. 2, lines 59-67 – col. 3, lines 1-9, col. 6, lines 128-49, col. 2, lines 59-67 – col. 3, lines 1-9, col. 6, lines 15-33).

(16) With regard to claim 19, claim 19 inherits all the limitations of claim 1. Riazi et al. further discloses in Fig. (8) wherein said human interface device is selected from the group consisting of a computer keyboard (90), a computer mouse (16), an interactive game controller, a joy stick, a game pad, a computer steering wheel, an electronic camera and combinations thereof.

(17) With regard to claim 20, see rejection of claim 1.

(18) With regard to claim 21, claim 21 inherits all the limitations of claim 20. See rejection of claim 14.

(19) With regard to claim 22, claim 22 inherits all the limitations of claim 20. See rejection of claim 15.

(20) With regard to claim 23, claim 23 inherits all the limitations of claim 20. See rejection of claim 16.

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(21) With regard to claim 24, claim 24 inherits all the limitations of claim 20. See rejection of claim 17.

(22) With regard to claim 25, claim 25 inherits all the limitations of claim 20. See rejection of claim 19.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nahi et al. (US Patent 6,166,734) in view of Riazi et al. (US Patent 6,748,005) as applied to claim 1 above, and further in view of Carrender et al. (US Patent 5,850,187).

With regard to claim 3, claim 3 inherits all the limitations of claim 1. Nahi et al. in combination with Riazi et al. disclose all the limitations of claim 1.

However Nahi et al. in combination with Riazi et al. do not disclose wherein said spread spectrum modulation is a direct sequence spread spectrum modulation.

However Carrender et al. discloses wherein said spread spectrum modulation is a direct sequence spread spectrum modulation (col. 13, lines 29-32).

Therefore it would have been obvious to one of ordinary skill in the art to modify the inventions of Nahi et al. in combination with Riazi et al. in view of Carrender et al. to incorporate wherein the spread spectrum modulation is a direct sequence spread spectrum modulation in order to provide a portable unit which includes a transceiver to be synchronous with a host computer for remote analysis (Carrender et al., col. 1, lines 66-67 – col. 2, lines 1-6).

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4. Claims 26, 27, 30, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dehner et al. (US Patent Application 2003/0035464) in view of Riazzi et al. (US Patent 6,748,005).

(1) With regard to claim 26, Dehner et al. discloses a method establishing a wireless connection between a human interface device and a host transceiver unit comprising: connecting said host transceiver with a host; transmitting a proposal identification at a first host transceiver spread spectrum modulation pattern using said host transceiver; detecting said proposal identification using said human interface device; transmitting a signal including said proposal identification to said host transceiver using said human interface device at said first human interface device spread spectrum modulation pattern; receiving said proposal identification from said human interface device, using said host transceiver; establishing said wireless connection using said host transceiver unit upon said host transceiver receiving said signal including said proposal identification send by said human interface unit (Pg. 2, col. 1, lines 31-63).

However Dehner et al. does not disclose adjusting said human interface device to transmit at said first transceiver spread spectrum modulation pattern.

However Riazzi et al. discloses adjusting said human interface device to transmit at said first transceiver spread spectrum modulation pattern (col. 10, lines 29-67 – col. 11, lines 1-2).

Therefore it would have been obvious to one of ordinary skill in the art to modify Dehner et al. to incorporate adjusting said human interface device to transmit at said

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first transceiver spread spectrum modulation pattern in order to provide a portable unit for interfacing with a nearby personal computer, allowing low cost access to the Internet and other information services (Riazi et al., col. 1, lines 64-67).

(2) With regard to claim 27, claim 27 inherits all the limitations of claim 26.

Dehner et al. further discloses wherein said spread spectrum modulation pattern is a frequency hopping spread spectrum modulation pattern (Pg. 2, col. 1, lines 31-40).

Dehner et al. does not explicitly disclose frequency hopping spread spectrum modulation however it is well known in the art that when a Bluetooth system is used data is transferred between communication devices by frequency hopping of a radio wave.

(3) With regard to claim 30, claim 30 inherits all the limitations of claim 26.

Dehner et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 2.4 GHz wireless connection (Pg. 2, col. 1, lines 31-33).

(4) With regard to claim 32, claim 32 inherits all the limitations of claim 26.

Dehner et al. further discloses wherein said host transceiver unit and said human interface device wirelessly exchange data over a 2.4 GHz spread spectrum wireless connection (Pg. 2, col. 1, lines 31-33).

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dehner et al. (US Patent Application 2003/0035464) in view of Riazi et al. (US Patent

6,748,005) as applied to claim 26, and in further view of Carrender et al. (US Patent 5,850,187).

With regard to claim 28, claim 28 inherits all the limitations of claim 26. Dehner et al. in combination with Riazzi et al. disclose all the limitations of claim 26.

However Dehner et al. in combination with Riazzi et al. do not disclose wherein said spread spectrum modulation is a direct sequence spread spectrum modulation.

However Carrender et al. discloses wherein said spread spectrum modulation is a direct sequence spread spectrum modulation (col. 13, lines 29-32).

Therefore it would have been obvious to one of ordinary skill in the art to modify the inventions of Dehner et al. in combination with Riazzi et al. in view of Carrender et al. to incorporate wherein the spread spectrum modulation is a direct sequence spread spectrum modulation in order to provide a portable unit which includes a transceiver to be synchronous with a host computer for remote analysis (Carrender et al., col. 1, lines 66-67 – col. 2, lines 1-6).

Allowable Subject Matter

6. Claims 12, 13, 29, 31, 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a system for wireless transfer of data. Prior art references show similar methods but fail to teach: **“wherein said host transceiver unit is configured to broadcast at one of a**

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plurality of host spread spectrum modulation patterns, each of which is a function of the host communication state, said human interface device is configured to broadcast at one of a plurality of device spread spectrum modulation patterns, each of which is a function of the device communication state”, as in claim 12; “said host communication state comprise off, scan, and connected states, and wherein said device communication states comprise sleep, scan and connected states”, as in claim 13; “transmitting data including said marriage identification from said host transceiver unit to said human interface device at a second host transceiver spread spectrum modulation pattern”, as in claim 29; “wherein said host transceiver unit and said human interface device wirelessly exchange data over a 900 MHz wireless connection”, as in claim 31; “wherein said host transceiver unit and said human interface device wirelessly exchange data over a 900 MHz spread spectrum wireless connection”, as in claim 33

7. Claims 34 and 35 allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: The instant application discloses a system for wireless transfer of data. Prior art references show similar methods but fail to teach: **“adjusting said host transceiver unit to transmit at said first human interface device spread spectrum modulation pattern”, as in claim 34.**

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cicely Ware whose telephone number is 571-272-3047. The examiner can normally be reached on Monday – Friday, 8-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571-272-3021. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

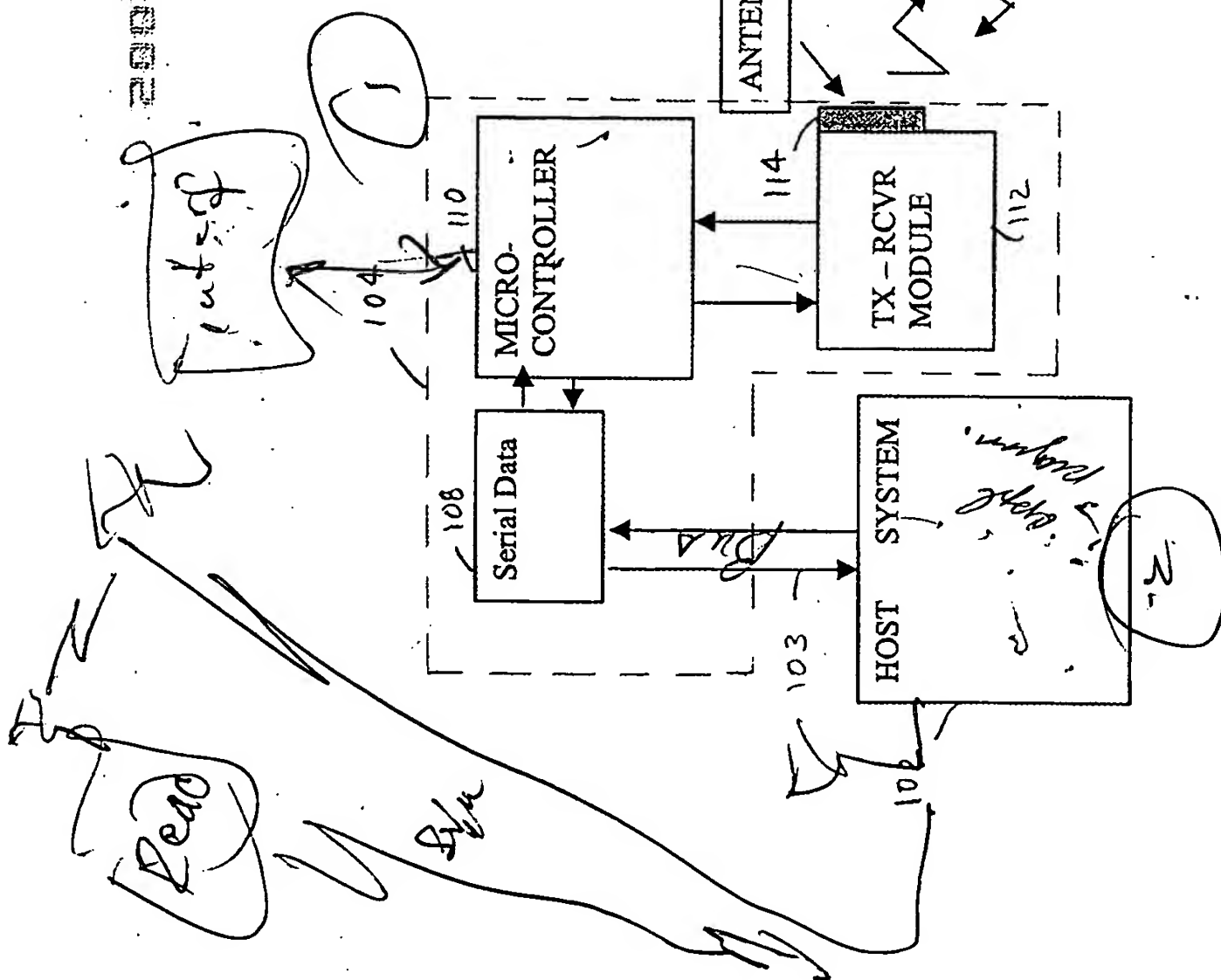
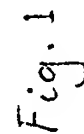
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Cicely Ware

cqw
October 24, 2006


MOHAMMED GRAYOUR
SUPERVISORY PATENT EXAMINER



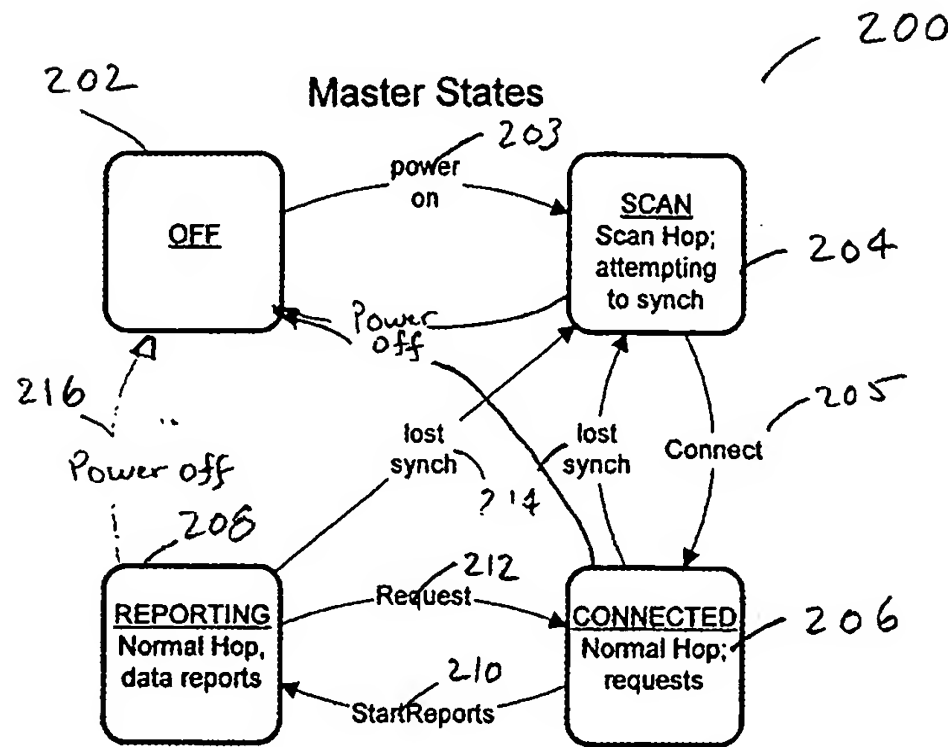


Fig. 2

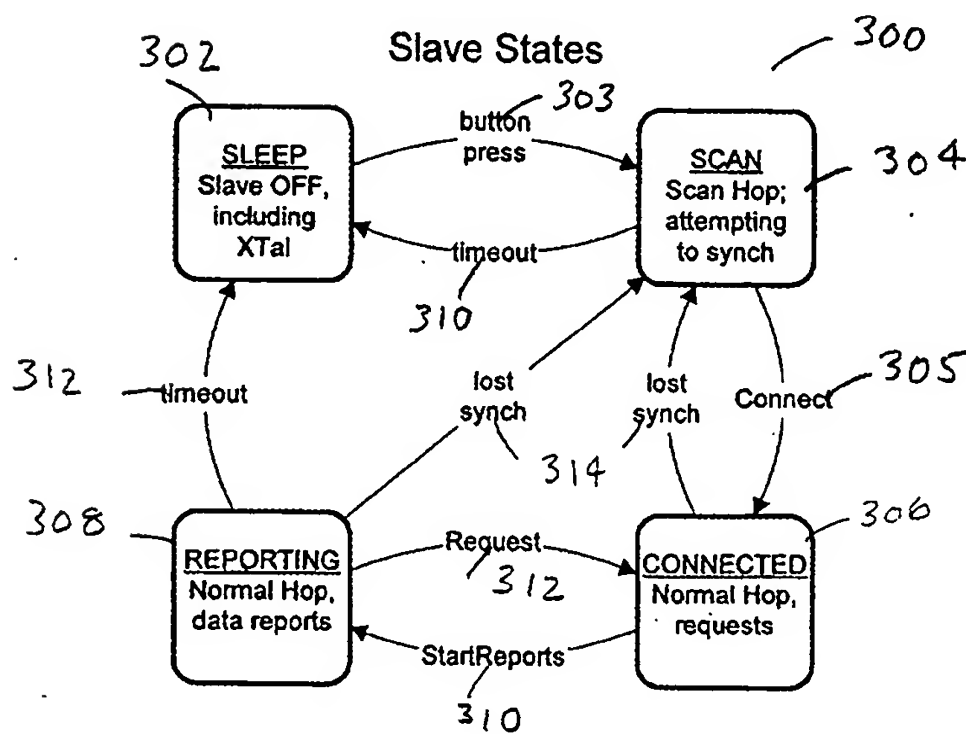


Fig. 3

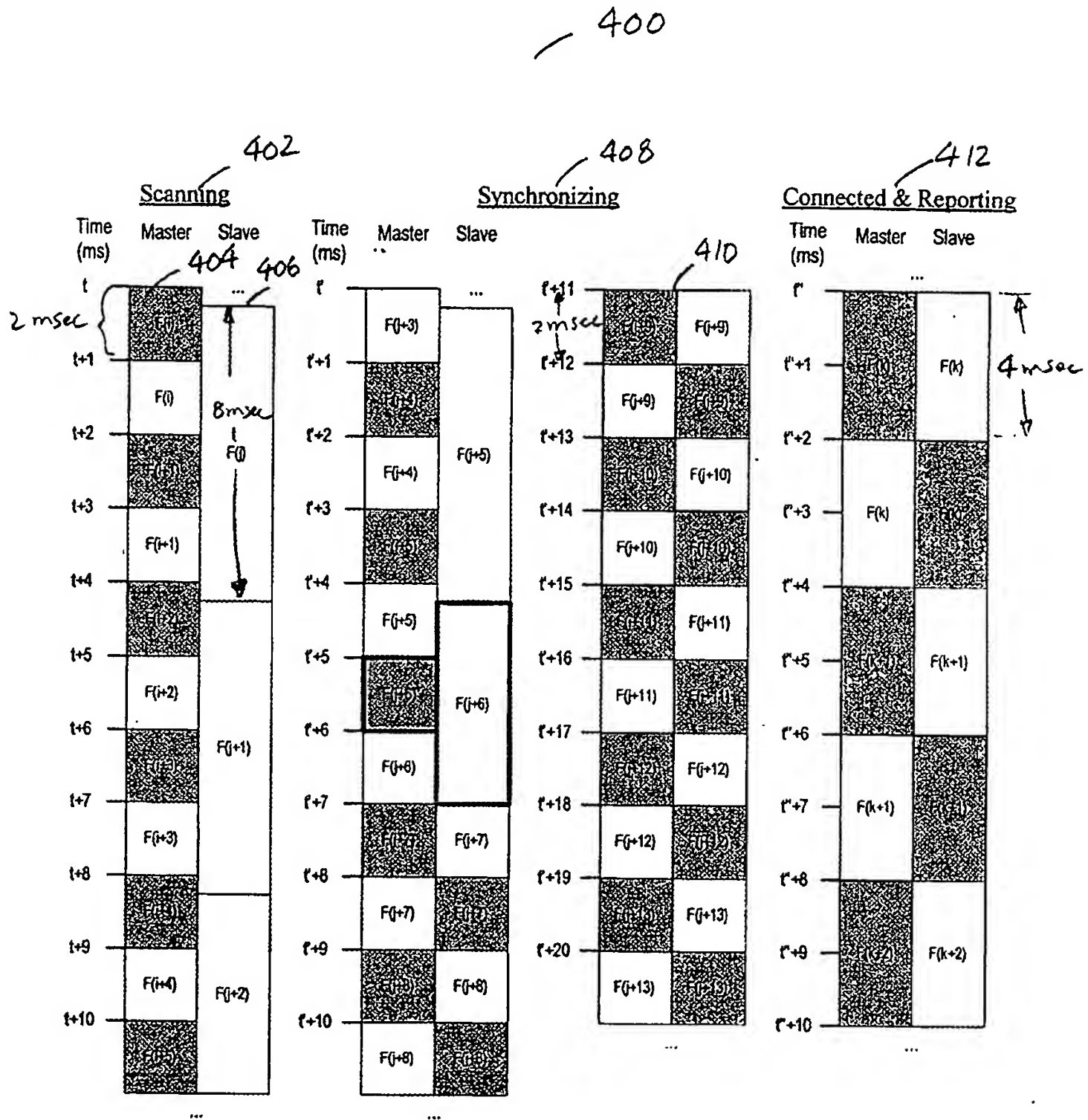


Fig. 4